

**What is claimed is:**

1. A communication system comprising:

a quality determining unit which determines a QoS (quality of service);

a gateway which transfers an IP datagram at  
5 said QoS; and

a user fee determining unit which determines a user fee for said IP datagram based on said QoS.

2. The communication system according to claim 1, wherein said gateway transfers a group of IP datagrams including said IP datagram, and said QoS includes a priority for said IP datagram in  
5 the transfer of said group of IP datagrams.

3. The communication system according to claim 1, wherein said QoS includes a maximum allowable difference from a predetermined delay time for transferring said IP datagram.

4. The communication system according to claim 1, wherein said gateway includes a buffer transiently storing said IP datagram, and said QoS includes a size of said buffer.

5. The communication system according to claim

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1, wherein said QoS includes provision of a firewall service.

6. The communication system according to claim 1, wherein said QoS includes provision of a VTN (Virtual Personal Network) service.

7. The communication system according to claim 1, wherein said gateway is provided with an API (Application Interface) for accessing said quality determining unit to set said QoS.

8. The communication system according to claim 1, wherein said gateway detects a protocol used for the transfer of said IP datagram, and said quality determining unit determines said QoS

5 based on said protocol.

9. The communication system according to claim 8, wherein said quality determining unit includes a first table indicative of a correspondence between said protocol and said QoS, and

5 determines said QoS referring to said first table.

10. The communication system according to claim 8, wherein said quality determining unit determines said QoS based on a ToS (Type of

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11. The communication system according to claim 10, wherein said quality determining unit includes a second table indicative of a correspondence among said protocol, said ToS and said QoS, and determines said QoS referring to said second table.

13. The communication system according to claim 12, wherein said quality determining unit includes a third table indicative of a correspondence among said protocol, said IP address and said QoS, and determines said QoS referring to said third table.

14. A communication system comprising:

a gateway which transfers an IP datagram, wherein said gateway detects a protocol used for the transfer of said IP datagram; and

5 a quality determining unit which determines

a QoS (quality of service) based on said protocol, wherein said gateway transfers said IP datagram at said QoS.

15. The communication system according to claim 14, wherein said gateway transfers a group of IP datagrams including said IP datagram, and said QoS includes a priority for said IP datagram in  
5 the transfer of said group of IP datagrams.

16. The communication system according to claim 14, wherein said QoS includes a maximum allowable difference from a predetermined delay time for transferring said IP datagram.

17. The communication system according to claim 14, wherein said gateway includes a buffer transiently storing said IP datagram, and said QoS includes a size of said buffer.

18. The communication system according to claim 14, wherein said gateway is provided with an API (Application Interface) for accessing said quality determining unit to set said QoS.

19. The communication system according to claim 14, wherein said quality determining unit

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determines said QoS based on a ToS (Type of Service) of said IP datagram.

20. The communication system according to claim 14, wherein said IP datagram includes an IP address of a user communicating said IP datagram, and said quality determining unit determines said QoS based on said IP address.

21. The communication system according to claim 20, wherein said QoS includes provision of a firewall service.

22. The communication system according to claim 20, wherein said QoS includes provision of a VTN (Virtual Personal Network) service.

23. A communication system comprising:

a gateway which transfers an IP datagram, wherein said gateway detects a protocol used for the transfer of said IP datagram; and

5 a user fee determining unit which determines a user fee for said IP datagram based on said QoS.

24. The communication system according to claim  
23, wherein said user fee determining unit

determines said user fee based on a ToS of said IP datagram.

25.       A communication method comprising:  
          determining a QoS;  
          transferring an IP datagram at said QoS by  
a communication system; and

5           determining a user fee for use of said  
communication system based on said QoS.

26.       A communication method comprising:

          receiving an IP datagram;

          detecting a protocol used for transmitting

said IP datagram;

5           determining a QoS; and

          transferring said IP datagram at said QoS.

27. A communication method comprising:  
transferring an IP datagram by a  
communication system;

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        detecting a protocol used for transmitting
5  said IP datagram;

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determining a user fee for use of said communication system based on said protocol.